

L12 ANSWER 31 OF 37 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1978:247907 BIOSIS
DN BA66:60404
TI THE FATTY-ACID CONTENT AND DRUG BINDING CHARACTERISTICS OF
COMMERCIAL ALBUMIN PREPARATIONS.
AU BIRKETT D J; MYERS S P; SUDLOW G
CS DEP. CLIN. PHARMACOL., FLINDERS UNIV. S. AUST., BEDFORD PARK, S. AUST.
5042, AUST.
SO CLIN CHIM ACTA, (1978) 85 (3), 253-258.
CODEN: CCATAR. ISSN: 0009-8981.
FS BA; OLD
LA English
AB The fatty acid contents of 13 commercial preparations of human albumin
were in the range 0.03-9 mol of fatty acid/mol albumin. Marked
differences
were found between the preparations in the binding of the fluorescent
probes, 5-dimethylamino-naphthalene-1-sulfonamide (DNSA) and
dansylsarcosine. The displacement of these probes by ibuprofen and
phenylbutazone also showed marked differences between preparations. The
differences between the commercial albumin samples correlated well with
their fatty acid contents and were abolished by treatment with charcoal.
They were similar to the changes observed when oleic acid was added to
fatty acid free albumin. The source and fatty acid content of commercial
albumin preparations should be considered when comparing studies of the
binding of drugs to human albumin.

L14 ANSWER 25 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1993:407034 BIOSIS
DN PREV199396072759

TI In vitro formation of oxidatively-modified and reassembled human
low-density lipoproteins: **Antioxidant effect of albumin**

AU Dobrian, Anca (1); Mora, Rosalia; Simionescu, Maya; Simionescu, Nicolae
CS (1) Inst. Cellular Biol. Pathol., 8 B.P. Hasdeu St., Bucharest 79691
Romania

SO Biochimica et Biophysica Acta, (1993) Vol. 1169, No. 1, pp. 12-24.
ISSN: 0006-3002.

DT Article

LA English

AB In early atherogenesis, excess plasma lipoproteins accumulate into the
arterial lesion-prone areas as modified and reassembled lipoproteins
(MRLp) appearing mostly as lipid droplets and vesicles. In the present
study we produced such MRLp, in a cell-free system, devoid of any
component of extracellular matrix, by subjecting in vitro human
low-density lipoproteins (LDL) to autoxidation or copper-induced
oxidation, for up to 96 h. As visualized by negative staining electron
microscopy, a large number of lipoprotein particles (Lp) were
progressively transformed into aggregates (ALp), fused particles (FLp)

and
the
by
vesicles (VLp). These modifications were paralleled by peroxidation of
samples as revealed by chemical analysis of each MRLp fraction isolated

a three-step purification procedure. LDL peroxidation in the above
conditions was inhibited by the presence of albumin as assessed by TBARS
and lipid analysis, and by the lack of MRLp formation. This protective
effect was independent of albumin source (bovine, human, rabbit) and
occurs at an albumin/LDL ratio of 1 when Cu-2+ was present, and at a
ratio

of 0.25 in autoxidative conditions. The results show that: (i) in vitro
LDL autoxidation or copper-induced peroxidation in a cell-free system can
generate modified and reassembled lipoproteins similar to those detected
in vivo in the arterial intima at the inception of atherogenesis; (ii) Lp
particles appear to be sequentially transformed in self-aggregates,
droplets and vesicles; (iii) serum albumin can completely prevent these
LDL alterations.

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(FILE 'HOME' ENTERED AT 08:57:57 ON 25 NOV 2002)

FILE 'BIOSIS' ENTERED AT 08:58:08 ON 25 NOV 2002

L1	44717 S EPINEPHRIN#
L2	116545 S PERFUSION OR PERFUSING OR PRESERVATION
L3	979 S L1 AND L2
L4	60182 S ADENOSINE
L5	40 S L4 AND L3
L6	12409 S ADRENALINE
L7	49319 S L1 OR L6
L8	2444 S L2 AND L4
L9	44 S L7 AND L8
L10	33 S L9 NOT L6
L11	4 S L9 NOT L5

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

44.51

44.72

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 09:15:50 ON 25 NOV 2002

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L3 979 S L1 AND L2
L4 60182 S ADENOSINE
L5 40 S L4 AND L3
L6 12409 S ADRENALINE
L7 49319 S L1 OR L6
L8 2444 S L2 AND L4
L9 44 S L7 AND L8
L10 33 S L9 NOT L6
L11 4 S L9 NOT L5
L12 438114 S HEART
L13 301 S L12 AND L2 AND L7
L14 9612 S KREB?
L15 14 S L14 AND L13

FILE 'WPIDS' ENTERED AT 10:10:20 ON 25 NOV 2002

L16 163 S L14
L17 3 S L13
L18 453 S EPINEPHRINE

FILE 'USPATFULL, USPAT2' ENTERED AT 10:14:52 ON 25 NOV 2002

L19 5682 FILE USPATFULL
L20 60 FILE USPAT2
TOTAL FOR ALL FILES
L21 5742 S EPINEPHRIN OR EPINEPHRINE OR ADRENALINE
L22 81772 FILE USPATFULL
L23 896 FILE USPAT2
TOTAL FOR ALL FILES
L24 82668 S HEART
L25 34882 FILE USPATFULL
L26 417 FILE USPAT2
TOTAL FOR ALL FILES
L27 35299 S PERFUSION OR PERFUSING OR PRESERVATION
L28 3159 FILE USPATFULL
L29 46 FILE USPAT2
TOTAL FOR ALL FILES
L30 3205 S L27 (P) L24
L31 165 FILE USPATFULL
L32 2 FILE USPAT2
TOTAL FOR ALL FILES
L33 167 S L30 AND L21

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

36.86

125.72

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 10:23:07 ON 25 NOV 2002

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FILE 'BIOSIS' ENTERED AT 08:58:08 ON 25 NOV 2002

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L2 116545 S PERFUSION OR PERFUSING OR PRESERVATION
L3 979 S L1 AND L2
L4 60182 S ADENOSINE
L5 40 S L4 AND L3
L6 12409 S ADRENALINE
L7 49319 S L1 OR L6
L8 2444 S L2 AND L4
L9 44 S L7 AND L8
L10 33 S L9 NOT L6
L11 4 S L9 NOT L5
L12 438114 S HEART
L13 301 S L12 AND L2 AND L7
L14 9612 S KREB?
L15 14 S L14 AND L13

FILE 'WPIDS' ENTERED AT 10:10:20 ON 25 NOV 2002

L16 163 S L14
L17 3 S L13
L18 453 S EPINEPHRINE

FILE 'USPATFULL, USPAT2' ENTERED AT 10:14:52 ON 25 NOV 2002

L19 5682 FILE USPATFULL
L20 60 FILE USPAT2
TOTAL FOR ALL FILES
L21 5742 S EPINEPHRIN OR EPINEPHRINE OR ADRENALINE
L22 81772 FILE USPATFULL
L23 896 FILE USPAT2
TOTAL FOR ALL FILES
L24 82668 S HEART
L25 34882 FILE USPATFULL
L26 417 FILE USPAT2
TOTAL FOR ALL FILES
L27 35299 S PERFUSION OR PERFUSING OR PRESERVATION
L28 3159 FILE USPATFULL
L29 46 FILE USPAT2
TOTAL FOR ALL FILES
L30 3205 S L27 (P) L24
L31 165 FILE USPATFULL
L32 2 FILE USPAT2
TOTAL FOR ALL FILES
L33 167 S L30 AND L21

FILE 'BIOSIS' ENTERED AT 10:46:23 ON 25 NOV 2002

L34 438114 S HEART
L35 66742 S UW OR (UNIVERSITY OR WISCONSIN)
L36 2984 S L34 AND L35
L37 1972 S UW OR (UNIVERSITY OF WISCONSIN)
L38 307 S L34 AND L37
L39 49319 S EPINEPHRINE OR EPINEPHRIN OR ADRENALINE
L40 1 S L38 AND L39
L41 301 S L39 AND L34 AND L2
L42 259707 S SOLUTION
L43 34 S L41 AND L42

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

20.62

146.34

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 10:55:40 ON 25 NOV 2002

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(FILE 'HOME' ENTERED AT 16:06:53 ON 22 NOV 2002)

FILE 'WPIDS' ENTERED AT 16:07:01 ON 22 NOV 2002

L1 0 S PCT/US98/19912
 E PCTUS9819912/AP, PRN 25
 E HASSANEIN WALEED/AU 25
L2 1 E2
L3 27310 S GLUCOSE OR DEXTROSE
L4 11526 S SODIUM CHLORIDE
L5 59483 S POTASSIUM
L6 100750 S CALCIUM
L7 72340 S MAGNESIUM
L8 456 S EPINEPHRIN#
L9 4159 S ADENOSINE
L10 2 S L9 AND L8 AND L7 AND L6 AND L5 AND L4 AND L3

FILE 'CAPLUS' ENTERED AT 16:13:10 ON 22 NOV 2002

L11 0 S L10

FILE 'USPATFULL, USPAT2' ENTERED AT 16:13:29 ON 22 NOV 2002

L12 140 FILE USPATFULL

L13 4 FILE USPAT2

TOTAL FOR ALL FILES

L14 144 S L10

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

18.74

73.15

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 16:19:41 ON 22 NOV 2002

S

=> d his

(FILE 'HOME' ENTERED AT 10:32:01 ON 29 NOV 2002)

FILE 'BIOSIS' ENTERED AT 10:32:06 ON 29 NOV 2002

L1	21164	S	ALBUMIN/TI
L2	0	S	SO/REV
L3	27024	S	REVIEW/SO
L4	5	S	L3 AND L1
L5	0	S	REVIEW/DT
L6	2951	S	CYTOPROTECTIVE
L7	8	S	L6 AND L1
L8	124484	S	FATTY ACID
L9	840	S	L1 AND L8
L10	26	S	ALBUMIN BOUND FATTY ACIDS
L11	13309	S	COMMERCIAL/TI
L12	37	S	L11 AND L1
L13	14741	S	ANTIOXIDANT/TI
L14	31	S	L1 AND L13
L15	111680	S	STEROID
L16	232	S	L15 AND L1
L17	165400	S	BOUND
L18	32	S	L17 AND L16

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

90.62

90.83

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 10:58:08 ON 29 NOV 2002